AMENDMENTS TO THE CLAIMS

1. (Currently amended) Material for neutron shielding and for maintaining sub-criticality comprising a matrix based on a vinylester resin, at least one polyamide, and an inorganic filler capable of slowing and absorbing neutrons, the organic filler comprising at least one hydrogenated inorganic compound and at least one inorganic boron compound.

2. (Original) Material according to claim 1, in which the polyamide is an aliphatic polyamide.

3. (Original) Material according to claim 2, in which the polyamide is chosen from among 11 polyamides, 12 polyamides, 6-12 polyamides and mixes of them.

4. (Currently amended) Material according to claim 1, in which the vinylester resin is chosen from the group composed of bisphenol A-type ~~epoxyacrylate and epoxymethacrylate~~ epoxy(meth)acrylate resins, novolac-type ~~epoxyacrylate and methacrylate~~ epoxy(meth)acrylate resins, ~~epoxyacrylate and epoxymethacrylate~~ epoxy(meth)acrylate resins based on halogenated bisphenol A, and resins obtained from an isophthalic polyester and an urethane.

5. (Currently amended) Material according to ~~claim 3~~ claim 4, in which the vinylester resin is a novolac-type ~~epoxyacrylate or epoxymethacrylate~~ epoxy(meth)acrylate resin.

6. (Canceled)

7. (Currently amended) Material according to ~~claim 6~~ claim 1, in which the hydrogenated inorganic compound is chosen from the group composed of alumina hydrates and magnesium hydroxide.

8. (Currently amended) Material according to ~~claim 6~~ claim 1, in which the inorganic boron compound is chosen from the group composed of boric acid, colemanite, zinc borates, boron carbide, boron nitride and boron oxide.

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9. (Currently amended) Material according to ~~claim 6~~ claim 1, in which the hydrogenated inorganic compound is alumina hydrate with formula ~~Al_2O_3~~ $Al(OH)_3$.

10. (Currently amended) Material according to ~~claim 6~~ claim 1, in which the inorganic boron compound is zinc borate with formula $Zn_2O_{14.5}H_7B_6$ or boron carbide.

11. (Currently amended) Material according to ~~claim 6~~ claim 1, with an atomic concentration of hydrogen between about 4.5×10^{22} and 6.5×10^{22} at/cm^3.

12. (Currently amended) Material according to ~~claim 6~~ claim 1, with an atomic concentration of boron between about 8×10^{20} and 3×10^{21} at/cm^3.

13. (Original) Material according to claim 1, in which the vinylester resin accounts for between 30 and 45% of the total mass of this resin, the polyamide and inorganic filler being capable of slowing and absorbing neutrons.

14. (Original) Material according to claim 13, in which the polyamide accounts for between 10 to 30% of the total mass of the vinylester resin, the polyamide and inorganic filler being capable of slowing and absorbing neutrons.

15. (Original) Material according to claim 1, with a density of between 1.3 and 1.6.

16. (Currently amended) Process for preparation of a material for neutron shielding and for maintaining sub-criticality comprising a matrix based on a vinylester resin, at least one polyamide and an inorganic filler capable of slowing and absorbing neutrons, the organic filler comprising at least one hydrogenated inorganic compound and at least one inorganic boron compound, including the following steps:

(a) mix the vinylester resin, the polyamide, and the inorganic filler capable of slowing and absorbing neutrons, with at least one resin polymerization accelerator,

(b) add at least one resin polymerization catalyst to this mix,

(c) degas the mix under a vacuum,

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(d) pour the mix obtained into a mould, and

(e) allow [[it]] the mix to set in the mould.

17. (Original) Process according to claim 16, in which the mould is composed of a compartment of a packaging for transport, interim storage and/or ultimate storage of radioactive products.

18. (Currently amended) Packaging for transport, interim storage and/or ultimate storage of radioactive materials, comprising at least one shield formed from the material as defined in any one of ~~claims 1 to 15~~ claims 1-5 and 7-15.

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